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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

REPORT

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1. The Institute of Industrial Projects (IPI - Institutul de Proiectari Industriale) is subordinate to the Ministry of Metallurgy and Chemical Industry. It was established in 1948 as a continuation of the Rumanian Government Central Industrial and Metallurgical Prefabrications (CIMP) Section.

2. IPI is composed of several services which cover such industrial planning items as machine tools, hoisting machinery, steam boilers, pumps, steam turbines, organization of factories, civil construction, and machinery for mining installations. These services receive orders from state firms.

3. An experimental workshop is attached to the Institute with the aim of making and experimenting in the manufacture of new machinery; it was, however, only able to build machinery but not experiment. Machines originally defective were altered and perfected. This was the case in a series of machine tools for making ball bearings, made according to German and Soviet specifications. Trials and corrections were begun on ball bearings in June 1950.

4. In February 1950 a turbine was on the planning board which was to have a power of 100 kilowatts and 3,000 revolutions per minute. This was in connection with a pump belonging to a steam boiler of the Sovromchim firm at Ucea, near Fagaras. The turbine was finished and installed by 15 July 1950.

5. On 1 August 1950 an order for 10 turbines for the Soviet Union was placed. They were each scheduled to be 3,000 kilowatts, 3,000 revolutions per minute at 32 ata (sic), and at 450° centigrade. This type of turbine was copied after a MAN turbine ordered in Germany before 1944 by an electric plant, and only part of which reached Rumania. The part reaching Rumania consisted of diaphrams, admission valves, the rotor (axle and discs with pallets), a pressure regulator, and some general plans.

   a. On 7 October 1950 copies of the blueprints of the above turbine were sent to the factory in Resita, and to the experimental workshop in Bucharest.

   b. The rotors for the turbines are being ordered

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c. The turbines have nine variances of high pressure, and six variances of low pressure.

d. The above turbines are being made by copying existing pieces, completing missing pieces, and sometimes using original plans. The experimental station had Brown Boveri reactions (sic) and some apparatus such as oil coolers and auxiliary pumps that were used in the above turbines.

6. While the turbines were being constructed it was decided to undertake the re-palleting of turbines for all electric power plants in the country. This was necessary because of the lack of original profiles, and the impossibility of importing them from abroad. A system had to be devised to take the profile of the pallets with the aid of patterns of gypsum or wax. The rotors or diaphrams were unscrewed during the turbine revision without being able to undo the pallets. The pallets were generally too small to permit a proper pattern to be taken. The new ones would deteriorate and not give proper performance.

7. The question of re-palleting is an important aspect in the Rumanian economy. On their functioning depends the proper running of electric plants which produce the necessary power for developing new industries, and keep the old ones in operation. Power plants have partially used up their turbines, and have exhausted all stocks of reserve turbines.

8. A ten year old electrification program for Rumania has been planned, which will require turbines in large quantities.